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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/645,168	(	08/19/2003	Hisanori Tsuboi	112857-420	7318	
29175	7590	04/08/2005		EXAMINER		
BELL, BO	YD & LL	OYD, LLC	HESS, B	HESS, BRUCE H		
P. O. BOX 1	135					
CHICAGO,	IL 6069	0-1135	ART UNIT	PAPER NUMBER		
				1774		

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.   Application No.   TSUBOLET AL.										
Examiner   Bruce H Hess   1774   1			Applica	ition No.	Applicant(s)					
Bruce H Hess   1774    - The MAILING DATE of this communication appears on the cover sheet with the correspondence address - Period for Reply    A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE   3   MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  HE MAILING DATE OF THIS COMMUNICATION    THE MAILING DATE OF THIS COMMUNICATION    HE Appead for reply specified above is less than thirty (0) days, and pay within the stantory entirely and pay of the control of the property of the period for reply specified above is less than thirty (0) days, and pay within the stantory entirely and pay of the control of this communication. If the period for reply specified above is less than thirty (0) days, and pay within the stantory entirely and pay of the control of this communication. Any reply received by the Office later than three months after the mailing date of this communication, which is the control of this communication. Any reply received by the Office later than three months after the mailing date of this communication, which is papilication is papilication is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s)	•	10/645	,1.68	TSUBOI ET AL.						
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THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be waited under the provision of 3 CFR 1.33(a). In no event, however, may a reply be timely filed after SIX (8) MONTHS from the mailing date of this communication and control of the provision of th	• • •	ATUTORY PERIOD F	OR REPLY IS SET	TO EXPIRE 3 M	IONTH(S) FROM					
1) Responsive to communication(s) filed on 1-7-93 (TDS) 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims 4) Claim(s) is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are allowed. 6) Claim(s) is/are objected to. 8) Claim(s) is/are objected to. 8) Claim(s) is/are objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Application Papers 9) The specification is objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) Note of: 1. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in Application No. 4) Interview Summary (PTO-413) Paper Notice of Informal Patent Application (PTO-152)	THE MAILING DAT  - Extensions of time may be after SIX (6) MONTHS from the period for reply specified by the period for reply is specified by the period for reply is specified by the period for reply within the period by the period by the period for reply received by the period for reply reply received by the period for reply reply received by the period for reply specified for reply specifie	E OF THIS COMMUN e available under the provisions om the mailing date of this com- cified above is less than thirty (i pecified above, the maximum s set or extended period for reply office later than three months	ICATION. s of 37 CFR 1.136(a). In no munication. 30) days, a reply within the statutory period will apply and y will, by statute, cause the a	event, however, may a reply be statutory minimum of thirty (30) d will expire SIX (6) MONTHS for application to become ABANDO	e timely filed  days will be considered timely rom the mailing date of this co  DNED (35 U.S.C. § 133).	mmunication.				
2a) ☐ This action is FINAL.  2b) ☐ This action is FINAL.  2b) ☐ This action is non-final.  3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) ☐ Claim(s) ☐ Is/are pending in the application.  4a) Of the above claim(s) ☐ Is/are allowed.  6) ☐ Claim(s) ☐ Is/are allowed.  6) ☐ Claim(s) ☐ Is/are allowed.  8) ☐ Claim(s) ☐ Is/are objected to.  8) ☐ Claim(s) ☐ Is/are objected to.  8) ☐ Claim(s) ☐ Is/are objected to by the Examiner.  Application Papers  9) ☐ The specification is objected to by the Examiner.  Application Papers  9) ☐ The drawing(s) filed on ☐ Is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  Application and the analysis of the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1 ☐ Certified copies of the priority documents have been received.  2 ☐ Copies of the certified copies of the priority documents have been received in Application No. ☐ 3 ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☑ Notice of Dratspersor's Patent Drawing Review (PTO-948)  3) ☑ Information Discosure Statement(s) (PTO-1449 - PTO-0548)  5) ☐ Notice of Information Paper Notice Notice of Information Paper Notice Notice of Information Paper Notice No			•							
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a)  All b) Some * c) None of:  1.	12) Acknowledgm	ent is made of a claim	for foreign priority	inder 35 U.S.C. & 119	9(a)-(d) or (f)					
1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  Attachment(s)  Attachment(s)  Attachment(s)  Attachment(s)  Attachment(s)  Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Notice of Informal Patent Application (PTO-152)	· —		Tor toroign priority	macr 00 0.0.0. g 1 10	)(u) (u) 0; (i).					
2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☒ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/98)  5) ☐ Notice of Informal Patent Application (PTO-152)	·	•	documents have h	een received						
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/98)  5) ☐ Notice of Informal Patent Application (PTO-152)					eation No.					
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U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)



1. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent to Tonoi et al. (JP 2001–001645) in view of the patent to Maruyama et al. (U.S.P. 5,296,439).

The primary reference teaches a reversible multicolor recording medium wherein the reversible thermal coloring compositions are stacked upon each other. Light—to-heat transforming materials are located in layers located under the respective reversible color. The secondary reference teaches the equivalence in reversible recording media of employing light-to heat transforming material either in the recording layer or under the recording layer. Given this teaching of equivalence, use of light—to—heat transforming material in the recording layers of the primary reference would have been obvious to one of ordinary skill in this art in the absence of unexpected results.

The secondary reference additionally teaches the advantages of using a protective layer over the recording medium. Use of a protective layer for its concomitant function on the recording material of the primary reference would have been an obvious expedient to one of ordinary skill in this art in the absence of unexpected results.

2. Azuma (U.S.P. 6,815,679) is cited for its disclosure of adding light-to-heat transforming materials to reversible recording layers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce Hess whose telephone number is (571) 272-1525. The examiner can normally be reached on Monday to Friday 9 Am to 5 PM.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/645,168 Page 3

Art Unit: 1774

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B. Hess/af

B. HAMILTON HESS PRIMARY EXPONER